

**ABSTRACT**

A method for energy storage and recovery for load hoisting equipment driven by a diode controlled DC motor and having an inverter controlling an induction motor which drives a flywheel whereby, utilizing rest power such as reverse power from the DC motor when lowering a load and unused power at small load or idle to accelerate rotation of a flywheel, whereby energy is stored, and the system is reversed when a load is lifted and power is consumed whereby the flywheel causes the induction motor to generate power and deliver it to the DC motor.